Claims:

- 1. A fibrinogen-based tissue adhesive, characterized in that it comprises an admixed elastase inhibitor.
- 2. A tissue adhesive according to claim 1, characterized in that the elastase inhibitor is selected from the group of eglin, elastase- α_1 -proteinase inhibitor, α_1 -antiprotease, leukocyte protease inhibitor, elafin, or mixtures thereof.
- 3. A tissue adhesive according to claim 2, characterized in that the leukocyte protease inhibitor is provided as a leukocyte fraction, in particular a granulocyte-derived fraction.
- 4. A tissue adhesive according to any one of claims 1 to 3, characterized in that it is composed exclusively of human proteins.
- 5. A tissue adhesive according to any one of claims 1 to 4, characterized in that it is composed exclusively of human blood- or plasma proteins.
- 6. A tissue adhesive according to any one of claims 1 to 5, characterized in that the elastase inhibitor is contained in an amount ratio of from 1:100 to

1:150,000, preferably 1 500 to 1:110,000, based on mg of fibrinogen.

- 7. A tissue adhesive according to any one of claims 1 to 6, characterized in that at least 10^{-6} U of elastase inhibitor are contained per g of fibrinogen, preferably between 10^{-3} and 10 U/g of fibrinogen.
- 8. A tissue adhesive according to any one of claims 1 to 7, characterized in that it contains plasminogen in an amount of at least 0.0001 mg/mg of fibrinogen, preferably at least 0.001, most preferred more than 0.01.
- 9. A tissue adhesive according to any one of claims 1 to 7, characterized in that it does not contain any plasminogen.
- 10. A tissue adhesive according to any one of claims 1 to 9, characterized in that it further comprises a plasmin inhibitor or a plasmin activator inhibitor which preferably is selected from the group of aprotinin, α_2 -macroglobulin, α_1 -antitrypsin, ϵ -aminocaproic acid, transxamic acid, or mixtures thereof.
- 11. A tissue adhesive according to any one of claims

1 to 10, characterized in that it comprises an antibiotic which preferably is selected from the group of aminoglycosides, betalactams, polypeptides, phosphomycin, tetracyclines or mixtures thereof.

- 12. A tissue adhesive according to any one of claims 1 to 11, characterized in that it comprises factor XIII, preferably in an amount of at least 0.001 U/mg of fibrinogen, particularly preferred at least 0.1 U/mg.
- 13. A tissue adhesive according to any one of claims 1 to 12, characterized in that it is free from kininogenic proteins.
- 14. A tissue adhesive according to any one of claims 1 to 13, characterized in that it is present in combination with a solid surface as a fleece.
- 15. A tissue adhesive according to claim 14, characterized in that the solid surface is a collagen, gelatin or polysaccharide surface.
- 16. A tissue adhesive according to any one of claims

 1 to 15. characterized in that in an environment of
 high fibrinolytic activity it is resistant to lysis for
 a period of time of at least 10 hours, preferably at
 least 15 hours.

- 17. A tissue adhesive according to any one of claims 1 to 16, characterized in that it is lyophilized.
- 18. A tissue adhesive according to any one of claims 1 to 16, characterized in that it is present in solution.
- 19. A tissue adhesive according to claim 18, characterized in that the solution is deep-frozen.
- 20. A tissue adhesive according to any one of claims 1 to 19, characterized in that it is present in virus-inactivated form.
- 21. A tissue adhesive according to any one of claims 1 to 20, characterized in that the elastase inhibitor is of recombinant origin.
- 22. A tissue adhesive system, characterized in that it comprises a tissue adhesive according to any one of claims 1 to 21 as one component thereof.
- 23. A tissue adhesive system according to claim 22, characterized in that it further comprises a component which comprises thrombin and, optionally, calcium.

- 24. A tissue adhesive system, characterized in that it comprises a fibrinogen component and a component which comprises an elastase inhibitor.
- 25. A tissue adhesive system according to claim 24, characterized in that the component which comprises an elastase inhibitor comprises thrombin.
- 26. A tissue adhesive system according to any one of claims 22 to 25, characterized in that it further comprises an application device for the component(s) of the system, in particular a double-syringe system.
- 27. The use of a tissue adhesive according to any one of claims 1 to 19 for producing a preparation to be applied in fields with high fibrinolytic activity, in particular in urology.
- 28. The use of a tissue adhesive sytem according to any one of claims 22 to 26 for producing an application device to be employed in fields with high fibrinolytic activity, in particular in urology.

